
Dakota Diabetes Coalition is proud to offer this column on diabetes and related concerns every other Friday.



Dr. Johnson is a family practice doctor in Grand Forks with a special interest in diabetes -- and a special knack for writing. As a member of the Dakota Diabetes Coalition, he has generously made himself available to answer questions through our listserv. If you have comments, or questions for Dr. Johnson to address in future columns, please contact gailhand@q.com



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Cancer and diabetes...

Overweight may be the common thread—and common health threat

Many complications of diabetes are well defined and well understood. In fact we've covered many of those here, including retinopathy (eye disease), nephropathy (kidney disease), neuropathy (nerve damage) and cardiovascular disease (heart disease, stroke, and peripheral arterial disease). Soon, I'll tackle the connection between diabetes and dementia.

Over the last few years, some data have emerged regarding increased risk of certain types of cancers in obese type 2 diabetes patients. This appears to be related to conditions that are common for most patients in the early course of type 2 diabetes, namely: obesity, insulin resistance and increased insulin levels.

Women with diabetes are 1.5 times more likely to have colon cancer than women without diabetes. Obesity has long been associated with colon cancer, but this newer evidence suggests that the presence of diabetes may also be a contributing factor. Although not proved conclusively, another gastrointestinal cancer, esophageal cancer, may also be associated with high carbohydrate intake, obesity and type 2 diabetes.

Breast cancer may also have a link to type 2 diabetes, although data suggest that diabetes does not lead to an increase risk of breast cancer. Instead, it appears that the mortality from breast cancer may be higher in women with type 2 diabetes, particularly in those with high C-peptide levels. C-peptide is a biochemical marker reflecting insulin levels, which may be elevated in early type 2 diabetes or pre-diabetes. For men, the risk of prostate cancer was actually slightly lower if type 2 diabetes was present, but this was thought to be due in part to the lower testosterone levels seen in many male type 2 patients.

Interestingly, some diabetes medications may reduce the risk of cancer in patients with type 2 diabetes. Metformin may lower risk of death from pancreatic cancer, as well as overall cancer mortality, although direct cause and effect is not proven. Bariatric surgery patients also appear to have a lower overall cancer death rate. The Utah Study revealed a 34% reduction in cancer in the surgery group, with a 46% lower mortality rate. The Swedish Obese Subjects study showed a 42% decrease in cancer in women, but no real effect was shown in men. Bariatric surgery has previously been tied to improved cardiovascular outcomes.

Cancer may outpace cardiovascular disease as the number one killer in the United States, partly as a result of increasing obesity. Of course, obesity is a well-established risk factor for cardiovascular disease. Prevention and reduction of obesity and subsequent type 2 diabetes may not only lower risk of cardiovascular disease, but certain types of cancers as well.

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